

**PATENTS**

**Customer No.: 6980**

**Docket No.: INTEL29**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of	)	Confirmation No.: 8505
	)	
ZADEHGOL, Ata <i>et al.</i>	)	Group Art Unit: 2817
	)	
Serial No.: 10/820,648	)	Examiner: GLENN, Kimberly
	)	
Filed: 8 APRIL 2004	)	Attorney Docket No.: INTEL29
	)	
Title: APPARATUS, SYSTEM, AND	)	
METHOD FOR HIGH FREQUENCY	)	Assignee: INTEL Corporation
SIGNAL DISTRIBUTION	)	

In accordance with 37 C.F.R. § 1.8, I certify that this correspondence is being transmitted to the Commissioner for Patents, MAIL STOP AMENDMENT, P.O. Box 1450, Alexandria, VA 22313 via the USPTO's EFS-Web Electronic Filing System on 11 JUNE 2006.

/jameshyanceyjr53809/  
James Hunt Yancey, Jr., USPTO Reg. No. 53,809

**37 C.F.R. § 1.116 RESPONSE TO FINAL OFFICE ACTION**

**Mail Stop AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

Sir:

In response to the *Final Office Action* from Examiner Kimberly E. Glenn of Art Unit 2817, mailed 16 May 2006, to which a response is due by 16 July 2006, Applicants submit this Response. Applicants respectfully request reconsideration of the above-identified application in view of the following remarks and amendments. Applicants respectfully assert that the Application is in condition for allowance and respectfully solicit early and favorable consideration. Applicants also request the Examiner to consider the finality of the recent *Office Action* and withdraw the finality status of the *Office Action*.

## **REMARKS**

In the 16 May 2006 *Final Office Action*, the Examiner rejected Claims 1-28 under 35 U.S.C. § 112, first paragraph. Applicants again thank the Examiner for the careful consideration and examination given to the present application.

By this *Response*, Applicants explain and discuss how Claims 1-28 are fully supported by the originally filed *Specification* in accordance with § 112. After entry of this *Response*, Claims 1-28 are pending in the Application.

Applicants respectfully assert that Claims 1-28 are in condition for allowance and respectfully request reconsideration of the claims in light of the following remarks. Applicants file this Response pursuant to 37 C.F.R. § 1.114 and § 1.116 to place the application into condition for allowance and to request the Examiner to reconsider the finality of the recent *Office Action*.

### **I. Interview Summary Pursuant to MPEP § 713.04**

The undersigned participated in a telephonic interview with Examiner Glenn on 8 June 2006 to discuss the *Final Office Action*. During the interview, the § 112 rejection was discussed and the undersigned discussed several portions of the originally filed *Specification* that fully support Claims 1-28. At the conclusion of the interview, Examiner Glenn requested the undersigned to file this *Response* to the *Final Office Action*.

The undersigned thanks the Examiner with appreciation for the courtesy extended to conduct the telephonic interview. If for any reason the Examiner does not consider the foregoing record complete and accurate, the Examiner is respectfully requested to contact the undersigned.

### **II. Claims 1-28 Are Fully Supported By Applicants' Originally Filed Specification**

In a previous Response, Applicants submitted claim amendments to independent Claims 1, 14, and 23. Applicants respectfully assert that these amendments place the present application in condition for allowance. In response to the amendments, the Examiner issued the *Final Office Action* asserting that the amendments are not supported. Applicant respectfully disagrees and asserts that Applicants' originally-filed *Specification* fully supports Claims 1-28 thereby complying with 35 U.S.C. § 112 and MPEP §§ 2163-2163.07.

Applicant's originally-filed Specification supports Claims 1-28 in at least several places. As mentioned above, Applicant introduced amendments to Claims 1, 14, and 23 in a previous response. These amendments introduced language into the claims regarding the claimed first

matching section. For example, Claim 1 was amended to include: “the first matching section providing signals at the first output and the second output having substantially equal phase and magnitude”. Claims 14 and 23 were similarly amended.

As discussed on Page 5 and in the *Abstract* of Applicant’s originally-filed *Specification*, a pie divider may be optimized to efficiently and accurately divide an input signal into a plurality of output signals having equal phase and magnitude. (Paragraph 15, Lines 1-3; Abstract, Lines 1-3). Applicants respectfully assert that these disclosures teach a pie divider that can provide outputs having equal phase and magnitude with respect to each other. Applicants also respectfully assert that these teachings also disclose a pie divider that can provide outputs having equal phase and magnitude with respect to the input signal thereby providing output signals having the same phase and magnitude as an input signal. For this to occur, the claimed first matching section must be necessarily be able to provide a signal to a pie divider that has equal phase and magnitude as an input signal. *See* MPEP § 2163.07(a). Otherwise, the pie divider outputs could not have equal phase and magnitude as an input signal. Accordingly, at least these teachings fully support currently pending Claims 1-28.

Applicants also respectfully assert that the originally filed claims provide further support for Applicants’ recent claim amendments. Indeed, Claims 1 and 2 as originally filed support currently pending Claims 1-28. Original Claim 1 recites in part “said outputs having substantially equal phase” and Claim 2 recites in part “said outputs have substantially equal magnitude”. Applicant respectfully asserts that this claim language applies to all outputs recited in Claim 1 — including the first and second outputs of the first matching section. Indeed, because the “said outputs having substantially equal phase” and “said outputs have substantially equal magnitude” features do not specifically limit what outputs they are referring to, Applicant respectfully asserts that they also apply to the first matching section’s outputs.

As further support for this argument, Claims 14 and 16 should be reviewed. Claims 14 and 16 recite specific references to certain outputs. For example, Claim 16 recites “at least one of said outputs of the pie-type impedance matching section”. Thus, this claim language recites a specific output in contrast to the language of original Claims 1 and 2, which do not contain such specific claim limitations. Accordingly, Applicants respectfully assert that original filed Claims 1 and 2 fully support currently pending Claims 1-28.

For these reasons, Applicants believe that Claims 1-28 are in condition for allowance. Applicants also respectfully assert that the previously cited references do not render Applicants' currently claimed invention as unpatentable and that the previous rejections have been overcome since they do not appear in the *Final Office Action*. Accordingly, Applicants respectfully assert that Claims 1-28 are allowable. Withdrawal of the § 112 rejection is respectfully requested.

### **III. Fees**

Applicants file this *Response* within two months of the 16 May 2006 *Final Office Action* and with no additional claims. Accordingly, Applicants believe that no extension or claims fees are due. The Commissioner is authorized, however, to charge any fees that may be required, or credit any overpayment, to Deposit Account No. 20-1507.

### **IV. Conclusion**

The foregoing is a complete response to the *Final Office Action* mailed 16 May 2006. Applicants respectfully assert that Claims 1-28 are in condition for allowance and respectfully requests passing of this case in due course of patent office business. If the Examiner believes there are other issues that can be resolved by a telephone interview, or there are any informalities remaining in the application which may be corrected by an Examiner's amendment, a telephone call to Hunter Yancey at (404) 885-3696 is respectfully requested.

Respectfully submitted,

TROUTMAN SANDERS LLP

/jameshuntyanceyjr53809/  
James Hunt "Hunter" Yancey, Jr.  
USPTO Registration No. 53,809  
Attorney for INTEL CORPORATION

TROUTMAN SANDERS LLP  
Bank of America Plaza  
600 Peachtree Street, NE  
Suite 5200  
Atlanta, Georgia 30308-2216  
United States of America  
P: (404) 885-3696  
F: (404) 962-6828  
E: hunter.yancey@troutmansanders.com  
**DATE: 11 JUNE 2006**